Claims 12-13 were rejected under 35 USC 103(a) as being unpatentable over Linnartz in view of Yokota et al. (Yokota) and Fox (the abstract of the article entitled "Wobble drives pirates off the digital seas", New Scientist, February 22, 1997, p. 22).

These rejections are respectfully traversed.

In explaining the rejection of claims 2-3, 5, 7, and 15, the Examiner relies on Park to support the rejection. However, the Examiner did not include Park in the statement of the rejection of claims 2-3, 5, 7 and 15 as required by the decision of In re Hoch, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970), which is discussed in MPEP 706.02(j) (Seventh Edition, Revision 1, February 2000), which provides as follows in pertinent part (emphasis added):

> Where a reference is relied to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. See *In re Hoch,* 428 F.2d 1341, 1342 n.3 166 USPQ 406, 407 n. 3 (CCPA 1970).

Footnote 3 of Hoch reads in pertinent part (emphasis added):

> Where a reference is relied on to support a rejection, whether or not in a "minor capacity," there would appear to be no excuse for not positively including the reference in the statement of rejection.

Applying the Hoch doctrine to the present situation, it is submitted that if the Examiner intended to rely on Park to support the rejection of claims 2-3, 5, 7, and 15, the Examiner was required to include Park in the statement of the

rejection of claims 2-3, 5, 7, and 15. Since the Examiner did not do this, it is submitted that the Examiner cannot rely on Park to support the rejection, and accordingly the Examiner's comments regarding Park will be disregarded until such time that the Examiner includes Park in the statement of the rejection of claims 2-3, 5, 7, and 15.

If the Examiner does include Park in the statement of the rejection of claims 2-3, 5, 7, and 15 in a future Office communication, it is submitted that this will constitute a new ground of rejection of claims 2-3, 5, 7, and 15.

Independent claim 1 recites a reproduction apparatus for reproducing video data and/or audio data from a medium dedicated to reproduction or a recordable medium having video data and/or audio data recorded thereon, said video data and/or audio data being generated by superimposing information concerning copying permission on a signal of digitized video data and/or a signal of audio data or embedding the information therein, said reproduction apparatus comprising a reproducing unit which reproduces the information concerning copying permission superimposed on or embedded in the video data and/or audio data, a determining unit which determines whether the medium to be reproduced is a medium dedicated to reproduction or a recordable medium, and a stopping unit which stops reproduction in response to the information reproduced by said reproducing unit indicating that copying once was permitted and a result of the determining by said determining

unit indicating that the medium is a medium dedicated to reproduction.

In explaining the rejection of claim 1, the Examiner states as follows:

> Linnartz discloses a reproduction apparatus for reproducing video data and/or audio data from a medium dedicated to reproduction and/or a recordable medium having video data and/or audio data recorded thereon, said video data and/or audio data being generated by superimposing information concerning copying permission on a signal of digitized video data and/or a signal of audio data or embedding the information therein (Abstract; see also column 2, line 26, through column 3, line 67), said reproduction apparatus comprising: a reproducing unit which reproduces the information concerning copying permission superimposed on or embedded in the video data and/or audio data (Abstract; column 5, lines 41-54); and a stopping unit which stops reproduction in response to the information reproduced by the reproducing unit indicating that copying once was permitted (column 3, lines 17-67; column 4, line 58, through column 5, line 2; column 6, lines 22-45). Linnartz discloses a determining unit which determines whether the medium to be reproduced is a recordable medium (column 5, lines 54-66; column 7, lines 4-13), but does not clearly and expressly disclose determining whether the medium to be reproduced is dedicated to reproduction or to recording; however, Doi teaches determining whether a medium is dedicated to reproduction or recording (column 13, lines 46-55). Hence, it would have been obvious to one of ordinary skill in the art of copy protection at the time of applicant's invention to include in the apparatus disclosed by Linnartz a determining unit which determines whether a medium to be reproduced is a medium dedicated to reproduction or a recordable medium, according to Doi, and to stop reproduction in response to a result indicating that the medium is a medium

> dedicated to reproduction, for the obvious advantage of limiting the reproduction of proprietary information.

The embodiment of Linnartz which appears to be the most relevant to claim 1 is the apparatus in Fig. 4 of Linnartz which uses a watermark W, a control ticket or control pattern T, and a medium mark P. The medium mark P is described, for example, in column 5, lines 54-63, of Linnartz which read as follows (emphasis added):

> An optional third type of copy-control mark, a record carrier pattern representing a recording medium mark identifying the medium (disc/tape/etc), may be applied separately or may also be related to the same watermark. A recording medium mark can be represented for instance by a wobble groove or a pit jitter modulation, and it preferably also is visually detectable. Recordable media may carry a fixed predetermined medium mark identifying the medium as recordable, or as a professional disc from a known source.

Thus, Linnartz may arguably be considered to disclose determining whether the medium to be reproduced is a recordable medium as alleged by the Examiner. However, it is not seen where Linnartz discloses using the result of such a determination for any particular purpose. That is, it is not seen where Linnartz discloses taking any particular action when it is determined that a medium to be reproduced is a recordable medium.

The Examiner apparently considers Linnartz to disclose a stopping unit which stops reproduction in response to the information reproduced by the reproducing unit indicating that

copying once was permitted based primarily on column 3, lines 27-40, of Linnartz which reads as follows:

> In an embodiment of the system according to our invention the above control pattern has the function of a copy permission mark, which is distributed along with the signal reproduced from an original recording. The recorder of that embodiment does verify the watermark in the signal against the copy permission mark. If both marks correspond, the content is recorded on a recordable record carrier and thus a first generation copy is made, but the permission mark itself is not recorded on the copy. So if the signal of the copy is reproduced, it no longer comprises the copy permission mark. The recorder will not make another recording from the signal from the first generation copy. Hence one and only one generation of copies can be made.

and column 4, line 58, through column 5, line 2, of Linnartz which reads as follows:

> An embodiment of the invention is a system for copy protection allowing one generation of copies, also called copy-once. A professional audio stream contains embedded copy-right data that grants permission to copy once. This is implemented by embedding a watermark y_{co} in the audio stream. Moreover the professional disc contains a special permission mark x_{co} where $y_{co}=H(x_{co})$ with H() a cryptographic one-way function. The mark y_{co} remains with the audio (possibly embedded) during playback, but it is removed by the consumer recorder. A copy made by the recorder therefore does not contain the permission mark and cannot be copied.

These portions of Linnartz relate to the apparatus in Fig. 4 of Linnartz.

The apparatus in Fig. 4 of Linnartz determines that optical disc 41 to be reproduced is a no-copy original disc

when two conditions are met--when comparator 423 determines that W = F(P) and when comparator 426 determines that W = F(T). When these two conditions are met, reproduction of optical disc 41 is permitted. See column 8, line 59, through column 9, line 28, of Linnartz.

Also, the apparatus in Fig. 4 of Linnartz determines that optical disc 41 to be reproduced is a copy-once allowed disc when two conditions are met--when comparator 424 determines that T = F(P) and when comparator 429 determines that W = F(F(F(T))). When these two conditions are met, reproduction of optical disc 41 is permitted. See column 8, line 59, through column 9, line 28, of Linnartz. The situation when comparator 429 determines that W = F(F(F(T))) appears to correspond most closely to the feature of claim 1 wherein the information concerning copying permission reproduced by said reproducing unit indicates that copying once was permitted.

The apparatus in Fig. 4 of Linnartz may also determine that optical disc 41 is a legal first generation copy when comparator 426 determines that W = F(T), in which case the medium mark P may be absent or have a predetermined value. See column 9, lines 10-16, of Linnartz. Presumably, when this condition is met, reproduction of optical disc 41 is permitted, although this is not entirely clear from Linnartz.

The Examiner considers Doi to disclose determining whether a medium is dedicated to reproduction or recording based on column 13, lines 46-55, of Doi which reads as follows:

> At this time, when the optical disk 1 is a CD, CD-ROM or DVD-ROM, the reflectance thereof is 90 to 100% and the amplitude changes in wide range, when the optical disk 1 is a DVD-R or CD-R, the reflectance thereof is 70% and the amplitude changes in a range narrower than in the case of CD, CD-ROM or DVD-ROM, and when the optical disk 1 is a DVD-RAM, the reflectance thereof is 30% and the amplitude changes in a range narrower than in the case of DVD-R or CD-R, and therefore, they can be distinguished from one another.

Since a CD, a CD-ROM, and a DVD-ROM are each a medium dedicated to reproduction, this passage of Doi may arguably be considered to disclose determining whether a medium is dedicated to reproduction. However, it is submitted that nothing whatsoever in Doi discloses or suggests stopping reproduction in response to a result indicating that the medium is a medium dedicated to reproduction as alleged by the Examiner.

Rather, according to column 13, lines 22-45, and column 13, line 56, through column 14, line 4, of Doi, the apparatus in Fig. 1 of Doi attempts to reproduce a loaded optical disk 1 using light having a power of 0.3 mW and a wavelength of 780 nm emitted from semiconductor laser oscillator 19 in response to a determination by CPU 30 that an amplitude of reflection light from the innermost circumference of loaded optical disk 1 is suitable for a CD, a CD-ROM, and a DVD-ROM, or, to use the Examiner's language, in response to a result indicating that the medium is a medium dedicated to reproduction. As described in column 14, lines 5-13, of Doi, if the reproducing attempt is not successful, the apparatus in Fig. 1 of Doi then

reproduces the loaded optical disk 1 using light having a power of 0.5 mW and a wavelength of 650 nm emitted from semiconductor laser oscillator 19.

Accordingly, it is submitted that if one of ordinary skill in the art were to combine Linnartz and Doi based on their teachings discussed above, the resulting apparatus would attempt to reproduce a medium using light having a power of 0.3 mW and a wavelength of 780 nm emitted from a semiconductor laser oscillator in response to a result indicating that the medium is a medium dedicated to reproduction, rather than stopping reproduction in response to a result indicating that a medium is a medium dedicated to reproduction as alleged by the Examiner.

The Examiner's attention is directed to MPEP 2143 (Seventh Edition, Revision 1, February 2000) which provides as follows (emphasis added):

> **2143 Basic Requirements of a *Prima Facie* Case of Obviousness**
>
> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.
>
> The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Here, it is submitted that there is no suggestion whatsoever in Linnartz and Doi themselves or in the knowledge generally available to one of ordinary skill in the art for one of ordinary skill in the art to combine Linnartz and Doi to provide an apparatus which stops reproduction in response to a result indicating that a medium is a medium dedicated to reproduction as alleged by the Examiner. Rather, it is submitted that the only suggestion that this be done is contained in the applicants' disclosure, which the Examiner is prohibited from relying on by MPEP 2143.

Accordingly, it is submitted that the rejection of claim 1 under 35 USC 103(a) as being unpatentable over Linnartz in view of Doi is based solely on a hindsight reconstruction of the present invention arrived at by reading the applicants' disclosure, such that the Examiner has not established a prima facie case of obviousness under 35 USC 103(a) with respect to claim 1.

Accordingly, for the reasons discussed above, it is submitted that Linnartz and Doi do not disclose or suggest a determining unit which determines whether the medium to be reproduced is a medium dedicated to reproduction or a recordable medium, and a stopping unit which stops reproduction in response to the information reproduced by said reproducing unit indicating that copying once was permitted and a result of the determining by said determining unit indicating that the medium is a medium dedicated to reproduction, as recited in claim 1.

Nor is it seen where these features of claim 1 are disclosed or suggested by Tozaki, Mardirossian, Yokota, and Fox.

Furthermore, it is submitted that Linnartz, Doi, Tozaki, Mardirossian, Yokota, and Fox do not disclose or suggest the features of independent claims 2-8 and 10-16 which are similar to the features of claim 1 discussed above for substantially the same reasons discussed above that Linnartz, Doi, Tozaki, Mardirossian, Yokota, and Fox do not disclose or suggest the features of claim 1 discussed above.

Since Linnartz, Doi, Tozaki, Mardirossian, Yokota, and Fox do not disclose or suggest the features of independent claims 1-8 and 10-16 discussed above, it is submitted that independent claims 1-8 and 10-16 and claim 9 depending from independent claim 8 patentably distinguish over Linnartz, Doi, Tozaki, Mardirossian, Yokota, and Fox in the sense of 35 USC 103(a), and it is respectfully requested that the rejections of claims 1-16 under 35 USC 103(a) as being unpatentable over various combinations of Linnartz, Doi, Tozaki, Mardirossian, Yokota, and Fox be withdrawn.

Although dependent claim 9 is considered to be allowable by virtue of its dependency from allowable independent claim 8, it is noted that this dependent claim also recites further features of the present invention which are not seen to be disclosed or suggested by the prior art.

As recognized by the Examiner, the other references cited but not relied upon neither disclose nor suggest the present

invention, and thus no further discussion of these other references is deemed necessary at this time.

It is submitted that all of the Examiner's rejections have been overcome, and that the application is now in condition for allowance. Reconsideration of the application and an action of a favorable nature are respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (500.37136X00).

Respectfully submitted,

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